

# Jeremy Kooyman | MASc.

✉ jeremy.kooyman@gmail.com

## Experience

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### Cambridge Design Partnership

*Mechanical Design Engineer, Medical Devices*

**Cambridge, UK**

*Sept 2014– current*

- Developed a Combination Product from Target Product Profile through EMA + FDA submission into Manufacturing Transfer and Launch, on-time/on-budget despite a 30% reduction in project timelines, including Risk Management and Design Verification/Validation activities.
- Acted as the Device Team representative alongside Global Regulatory Affairs during a FDA deficiency letter response.
- Worked closely with patients and other healthcare stakeholders to perform research and develop product requirement specifications from identified solution-agnostic needs.
- Led clients through ISO 14971-compliant Risk Management exercises and knowledge transfer workshops.
- Audited device Technical Files for MDD compliance.

### Kooyman Engineering Services Limited

*Private Contractor*

**Vancouver/Calgary, Canada**

*Aug 2013– Jun 2014*

- Designed and validated a verification test for a robotic-assisted surgical device.
- Designed a number of "world-first" products and procedures for markets spanning from computer assisted orthopaedic surgery to high performance athletics.

### Arbutus Medical Engineering

*Design Engineer*

**Vancouver, Canada**

*Aug 2013– Sept 2014*

- Designed, verified, validated, and transferred to manufacture the textile component of a novel orthopaedic surgical tool, successfully used in thousands of surgeries globally.

### University of British Columbia, Neuromotor Control Laboratory

*Graduate Research Student*

**Vancouver, Canada**

*Sept 2011– Aug 2013*

- Designed a minimally invasive surgical tool which improved accuracy of bone removal and reduced procedure duration and presented the findings at the top computer-assisted orthopaedic surgery conference globally.

### University of British Columbia

*Engineers in Scrubs Trainee*

**Vancouver, Canada**

*Sept 2011– Apr 2012*

- Delivered an innovative solution to reduce operating theatre adverse events following an identified medical device reprocessing problem in a major trauma centre's Sterile Processing Department.

### University of Calgary

*Undergraduate Research Student*

**Calgary, Canada**

*May 2009– Aug 2011*

- Performed bioremediation research with bacteria-based bioreactors for cleaning oil sands tailings ponds, laying the framework for future graduate research.
- Worked with recombinant proteins to develop an injectable biologic to treat osteoarthritis and presented the findings at the top orthopaedics research conference.

## Education

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### University of British Columbia

*MASc. Biomedical Engineering*

**Vancouver Canada**

*2011 – 2013*

Thesis Title: Tool Bracing for Performance Improvement in Simulated Femoral Head-Neck Osteochondroplasty

Supervisor: Dr. Antony Hodgson, NSERC Design Engineering Chair

Scholarships: Faculty of Applied Science Graduate Award (Academic), UBC Mechanical Engineering Department

Scholar (Academic), Alexander Graham Bell Canada Graduate Scholarship (Academic, Merit)

### Schulich School of Engineering

*BSc. with Distinction, Mechanical Engineering*

**Calgary Canada**

*2007 – 2011*

Thesis Title: Sedimentation of Oil Sands Tailings via Microbial Treatment

Supervisor: Dr-Ing. Roberto J Martinuzzi, Pratt & Whitney Industrial Fellow

Scholarships: NSERC Undergraduate Research Award (Academic), Biomedical Engineering Distinguished Service Award (Merit), Darren Cooper Memorial Award (Academic)

## Personal Interests

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**Climbing:** Former internationally ranked youth competitive climber and coach.

**Cycling:** Downhill, all-mountain, road.

**Medical Technology:** Blogging personally, writing professionally. Recently published in MEDSim Magazine (readership of 40,000 organizations). Speaker for Cambridge Usability on medical device design.

**Movember:** Best Kooyman in the world at growing a moustache. Movember Canada 2012.